PMH-3040 HDPE

■ 雨虹 YUHONG ■

High Density Polyethylene (HDPE) Pre-Laid Waterproof Membrane

C€ ISO 9001-2008 ISO 14001:2004 OHSAS 18001:2007 ISO 17025:2005

Description

PMH-3040 HDPE is a Pre-Laid Waterproof Membrane System creates strong bonding with poured concrete. It is a waterproof membrane incorporating a high density polyethylene (HDPE) backing with adhesive layer and a protective layer.

PMH-3040 was created especially for below foundations, on basement walls and tunnel projects.

It strongly adheres to concrete poured onto it. After membrane bonds to concrete, possible water leakage will be blocked between the membrane and concrete. Isolates and protects the sturucture against the ground water and gases.

There is a 70mm width on the membrane to be reserved for self-adhesive overlap.

The thickness of PMH-3040 HDPE is 1,0mm, 1.2 mm or 1.5 mm.



Where to Use

- Basements and basement walls
- Subways;
- Tunnels;
- •Other underground public constructions.

Advantages

- New wet bonding technique;
- Sedimentation and deformation of basic layers does not affect the waterproofing performance;
- Resistance to chemicals, protects structure from salts and sulphate attact;
- Mould-resisting, weather-resisting and corrosion-resisting;
- Low requirements for basic layers;
- Convenient to apply and no torch heated overlaps;
- Safe and eco-friendly.

Yuhong High Density Polyethylene Waterproof System Includes:

- **PMH-3040 HDPE** membrane with 1.2mm and 1.5mm thickness options choosen for the characteristics of project.
- Sticky Tape: Two types of sticky tape exists.
 - Double sided sticky
 - -One side sticky one side adhered to poured concrete
- Nonwoven Laying for Tunnel Applications

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Application Method

Surface preparation

All surfaces should be firm, dense, smooth and without bumps, cracks and large holes.

The horizontal surfaces should be plain concrete or other dense bases. Loose particles should be avoided.

The sheet-pile/concrete pile and the support plate on vertical substrates should be joined tightly to provide supports. Horizontal surfaces, not needed to be dry but standing water should be removed.



Membrane Laying

Fixing membranes on horizontal planes

- When applying the membrane, face the HDPE side to the ground and face the release liner side towards pouring concrete. Overlaps should be done by the following the overlap markings. The roll ends should be joined by Sticky Tapes.
- The width of the existing overlap area along the length direction is 70mm. Remove the isolation films off to make two membrane edges to join each other. Then use a roller to apply pressure on overlap areas and remove possible air to bond membranes tightly to ensure overlapping done properly.
- On the transversal laps, use 70-80mm width **Sticky Tapes.** Clean the joints at first, then attach the adhesive tapes to the joints and press tightly to ensure a continuous bond.
- Before placing the reinforcement the plastic release liner must be removed from the membrane.
- Use suitable rebar spacers referred by the manufacturer.

Fixing membranes on vertical planes

- Mechanically fasten the membrane by HDPE side faced to the wall and the release liner facing towards pouring concrete.
- The mechanically fastening should be done in every 400-600mm (or according to the design) at least 10mm away from the edges.
- The upper edge of membrane should be sealed by specific Sticky Tapes.
- Ensure removing plastic release liner before reinforcement placing.

Technical Data According to EN 13967

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Test item	Test method	Unit	Requirement
Water tightness to liquid water	EN 1928		60KPa, Pass
Durability of water tightness against chemicals and alkali	EN 12691		60KPa, Pass
Durability of water tightness against ageing	EN 12691		60KPa, Pass
Tensile force (Longitudinal and Transversal)	EN 12311-2	N/50mm	≥800
Elongation (Longitudinal and Transversal)	EN 12311-2	%	≥500
Peel resistance of joint	EN 12317-2	N/50mm	400
Resistance to impact	EN 12691-B	mm	600
Bitumen compatibility	EN 1548		Pass



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For Best Performance

Minimum application temperature is 5°C. For the applications at lower temperatures, please contact with manufacturer. PMH membranes should only be applied by trained applicators. Spikes wearing people should be avoided from the application areas. When doing the lapping process along the length direction, adhesive planes should be clean and press should be tight to ensure good bonding abilities. Smoking is not allowed at the application area.